

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-200X-XXX

NPDES NO. CA0078841

WASTE DISCHARGE REQUIREMENTS
FOR
SIERRA PACIFIC INDUSTRIES
CAMINO LUMBER MILL
EL DORADO COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) finds that:

BACKGROUND

1. Sierra Pacific Industries (hereafter Discharger) submitted a Report of Waste Discharge, dated 27 December 2001, and applied for a permit renewal to discharge waste under the National Pollutant Discharge Elimination System (NPDES) from the Camino Lumber Mill. Supplemental information to complete the application was received on 18 February 2002, 10 September 2003, and 21 April 2004.
2. The Discharger operates the 85-acre lumber mill in the community of Camino located in the southwest $\frac{1}{4}$ of Section 5 and the northwest $\frac{1}{4}$ of Section 8, T10N, R12E, MDB&M, as shown in Attachments A and B, which are incorporated herein and made a part of this Order by reference.
3. The facility processes approximately 115 million board feet of construction grade lumber annually. Logs are delivered by truck to the lumber mill, stacked in a 21 acre paved area (log deck) and are kept wet by a sprinkler system to prevent checking and blue staining. Bark is removed from the logs through a mechanical barking process. Following bark removal, the logs are rough cut, dried in a kiln, planed to final size and wrapped for shipment. Heat to the kilns is provided by a wood fired boiler.

Liquid wastestreams generated from the sawmill operations include log deck runoff, water utilized in the barking operations, filter backwash from boiler supply water treatment, boiler blowdown, condensate from the kilns, runoff from the maintenance area, and stormwater. Domestic wastewater is treated in a septic system and discharged to a leach field regulated by the County. Boiler blowdown may not include chemicals for corrosion control, biocides or any other chemical additives if the discharge is commingled with log deck runoff and/or discharged to surface waters.

Federal Regulations contain guidelines for sawmill operations, which prohibit the discharge of barking, sawmill, planing and finishing process wastewater into navigable waters. Other than log deck wastewater, all other waste streams from the sawmill operations are prohibited from being discharged to surface waters. Waste streams from the various sawmill operations have

been traditionally commingled and discharged to surface waters, although land disposal was maximized. This Order implements the Federal Regulations and prohibits the discharge of the applicable sawmill operations wastestreams to surface waters.

4. The Report of Waste Discharge describes the discharge from past operations at Outfall 001(SP5) and Outfall 002 (SP4) as follows:

Flow is intermittent and only occurs during storm events. The volume of water discharged is rainfall dependent.

Constituent	mg/l
COD ¹	37.0 (max.)
Total Organic Carbon	9.0
<u>Total Suspended Solids (TSS)</u>	58.0

¹ COD – chemical oxygen demand

WASTEWATER OPERATIONS

5. *Log Deck Runoff:*

To maximize land disposal, the Discharger retains all log deck water onsite during the dry season, either in storage/evaporation ponds or by disposal by spray irrigation. Excess water applied to the log deck flows in open trenches to a wastewater control structure. The runoff from the log deck is recirculated back to the log decks from the water control structure. While sprinkling, the log deck is operated in a closed loop system. During precipitation periods, the log and the log yard runoff is directed to a retention pond (called the Schmidt Ditch). If the Schmidt Ditch reaches capacity, the ditch is designed to over flow and discharge to an unnamed tributary to North Canyon Creek, at a point approximately located at latitude 38° 44'43" (deg, min, sec) and longitude 120° 40'43 (Outfall A), as shown on Attachment A, a part of this Order. North Canyon Creek is a water of the United States and tributary to the South Fork of the American River.

Annually during the first significant storm event ("first flush"), the sprinklers are shut off, and all of the logdeck runoff is diverted to storage Pond P-1 via Pond P-A. This first flush stormwater/wastewater contains the concentrated pollutants that have been recirculated to the log deck during the past year. Disposal of this wastestream is by evaporation/percolation in the ponds or irrigation of the spray fields when weather permits. Tailwater from the irrigation area is returned to the ponds.

Other Sawmill Operation Wastestreams

The waste streams from other sawmill operations are commingled, stored in Pond P-1, and subsequently disposed of on the spray irrigation field as weather permits. These waste streams are not recycled for use on the log deck, or discharged to surface waters.

6. The U.S. Environmental Protection Agency (U.S. EPA) and the Regional Board have classified this discharge as a minor discharge.

7. The Regional Board adopted a *Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins* (hereafter Basin Plan). The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin. These requirements implement the Basin Plan.
8. U.S. EPA adopted the *National Toxics Rule* (NTR) on 5 February 1993 and the *California Toxics Rule* (CTR) on 18 May 2000. These Rules contain water quality standards applicable to this discharge. The SWRCB adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Plan (SIP)), which contains guidance on implementation of the NTR and the CTR.

RECEIVING WATER BENEFICIAL USES

9. The Basin Plan at page II-2.00 states: “Existing and potential beneficial uses which currently apply to surface waters of the basins are presented in Figure II-1 and Table II-1. The beneficial uses of any specifically identified water body generally apply to its tributary streams.” Furthermore, the Regional Board generally is required to apply the beneficial uses of municipal and domestic supply to surface waters based on State Board Resolution No. 88-63, which was incorporated in the Basin Plan pursuant to Regional Board Resolution 89-056.

The Basin Plan does not specifically identify beneficial uses for the unnamed tributary to North Canyon Creek or North Canyon Creek, but does identify present and potential uses for the South Fork of the American River. The unnamed tributary to North Canyon Creek and North Canyon Creek are tributary to the South Fork of the American River. The unnamed tributary to North Canyon Creek and North Canyon Creek are in the South Fork, Sources to Placerville Subarea (514.32) of the American River Hydrologic Unit (514.00), in the Sacramento Hydrologic Basin.

The Regional Board finds that the beneficial uses identified in the Basin Plan for the South Fork of the American River, Sources to Placerville, are applicable to the unnamed tributary to North Canyon Creek and North Canyon Creek. These beneficial uses are domestic and municipal supply, hydropower generation, water contact recreation, canoeing and rafting, other non-contact water recreation; warm freshwater habitat, cold freshwater habitat, cold freshwater spawning, and wildlife habitat. The Basin Plan on page II-1.00 states: “Protection and enhancement of existing and potential beneficial uses are primary goals of water quality planning...” and with respect to disposal of wastewaters states that “...disposal of wastewaters is [not] a prohibited use of waters of the State; it is merely a use which cannot be satisfied to the detriment of beneficial uses.”

In reviewing whether the existing and/or potential uses of the South fork of the American River apply to the unnamed tributary to North Canyon Creek and North Canyon Creek, the Regional Board has considered the following facts:

a. *Municipal and Domestic Supply and Agricultural Irrigation*

The Basin Plan (Table II-1) designates the beneficial uses of municipal and domestic supply to the South Fork of the American River. In addition, the SWRCB has issued water rights to existing water users along the South Fork of the American River and North Canyon Creek downstream of the discharge for domestic and irrigation uses. Since the unnamed tributary and North Canyon Creek are ephemeral streams, they also likely provide groundwater recharge during periods of low flow. The groundwater is a source of drinking water. In addition to the existing water uses, growth in the area, downstream of the discharge is expected to continue, which presents a potential for increased municipal, domestic and agricultural uses of the water in receiving stream.

b. *Water Contact and Noncontact Recreation and Esthetic Enjoyment*

The Regional Board finds that the discharge flows through residential areas, and there is ready public access to the unnamed tributary of North Canyon Creek, North Canyon Creek, and the South Fork of the American River. Exclusion of the public is unrealistic and contact recreational activities currently exist along the unnamed tributary of North Canyon Creek, North Canyon Creek, and the South Fork of the American River and these uses are likely to increase as the population in the area grows.

c. *Preservation and Enhancement of Fish, Wildlife and Other Aquatic Resources*

The California Department of Fish and Game (DFG) has verified the presence of rainbow trout, green sunfish, channel catfish, and large mouth bass in North Canyon Creek. Additionally, discussions with residents in the area confirmed the presence of trout in the tributary of North Canyon Creek. These findings are consistent with both cold- and warm-water fisheries and there is a potential for anadromous fish migration, thus necessitating a cold-water designation. The Basin Plan (Table II-1) designates the South Fork of the American River as being both a cold and warm freshwater habitat. Therefore, pursuant to the Basin Plan, the cold designation applies to the unnamed tributary of North Canyon Creek, North Canyon Creek, and the South Fork of the American River. The cold-water habitat designation necessitates that the in-stream dissolved oxygen concentration be maintained at, or above, 7.0 mg/L. This approach recognizes that, if the naturally occurring in-stream dissolved oxygen concentration is below 7.0 mg/L, the Discharger is not required to improve the naturally occurring level. As stated in the above Findings, currently the unnamed tributary of North Canyon Creek and North Canyon Creek are ephemeral streams.

d. *Groundwater Recharge*

In areas where groundwater elevations are below the stream bottom, water from the stream will percolate to groundwater. Since the unnamed tributary to North Canyon Creek, and North Canyon Creek is at times dry, it is reasonable to assume that the stream water is lost

by evaporation, flow downstream and percolation to groundwater providing a source of municipal and irrigation water supply.

e. *Freshwater Replenishment*

When water is present in the unnamed tributary to North Canyon Creek, and North Canyon Creek, there is hydraulic continuity with the South Fork of the American River. During periods of hydraulic continuity, North Canyon Creek adds to the water quantity and may impact the quality of water flowing down stream in the South Fork of the American River.

Upon review of the flow conditions, habitat values, and beneficial uses of the South Fork of the American River, and the facts described above, the Regional Board finds that the beneficial uses identified in the Basin Plan for the South Fork of the American River are applicable to the unnamed tributary to North Canyon Creek and North Canyon Creek.

10. The Regional Board also finds that based on the available information and on the Discharger's application, that the unnamed tributary to North Canyon Creek, and North Canyon Creek, absent the discharge are ephemeral streams. The ephemeral nature of the waterways means that the designated beneficial uses must be protected, but that no credit for receiving water dilution is available. Although the discharge, at times, maintains the aquatic habitat, constituents may not be discharged that may cause harm to aquatic life. At other times, natural flows within the waterways help support aquatic life. Both conditions may exist within a short time span, where the waterways would be dry without the discharge and periods when sufficient background flows provide hydraulic continuity with the South Fork of the American River. Dry conditions occur primarily in the summer months, but dry conditions may also occur throughout the year, particularly in low rainfall years. The lack of dilution results in more stringent effluent limitations to protect contact recreation, drinking water, agricultural water uses, and aquatic life. Significant dilution may occur during and immediately following high rainfall events.

EFFLUENT LIMITATIONS AND REASONABLE POTENTIAL

11. Federal regulations require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numerical water quality standard.
12. The federal Clean Water Act (CWA) mandates the implementation of effluent limitations that are as stringent as necessary to meet water quality standards established pursuant to state or federal law. (33 U.S.C., § 1311(b)(1)(C); 40 C.F.R., § 122.44(d)(1)) NPDES permits must incorporate discharge limits necessary to ensure that water quality standards are met. This requirement applies to narrative criteria as well as to criteria specifying maximum amounts of particular pollutants. Pursuant to Federal Regulations, 40 C.F.R. section 122.44(d)(1)(i), NPDES permits must contain limits that control all pollutants that "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality."

Federal Regulations, 40 CFR, Section 122.44(d)(1)(vi), further provide that “[w]here a state has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard, the permitting authority must establish effluent limits.”

13. The Regional Board’s Basin Plan, page IV-17.00, contains an implementation policy (“Policy for Application of Water Quality Objectives”) that specifies that the Regional Board “will, on a case-by-case basis, adopt numerical limitations in orders which will implement the narrative objectives.” This Policy complies with 40 CFR 122.44(d)(1). With respect to narrative objectives, the Regional Board must establish effluent limitations using one or more of three specified sources, including EPA’s published water quality criteria, a proposed state criterion (i.e., water quality objective), or an explicit state policy interpreting its narrative water quality criteria (i.e., the Regional Board’s “Policy for Application of Water Quality Objectives”)(40 C.F.R. 122.44(d)(1) (vi) (A), (B) or (C)). The Basin Plan contains a narrative objective requiring that: “All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life”. The Basin Plan requires the application of the most stringent objective necessary to ensure that surface water and groundwater do not contain chemical constituents, toxic substances, radionuclides, or taste and odor producing substances that adversely affect beneficial uses. The beneficial uses include municipal and domestic supply, agricultural irrigation supply, water contact and non-contact recreation and aquatic habitat and migration. The Basin Plan states that material and relevant information, including numeric criteria, and recommendations from other agencies and scientific literature will be utilized in evaluating compliance with the narrative toxicity objective. The Basin Plan also limits chemical constituents in concentrations that adversely affect surface water beneficial uses. For waters designated as municipal, the Basin Plan specifies that, at a minimum, waters shall not contain concentrations of constituents that exceed Maximum Contaminant Levels (MCL) of CCR Title 22. The Basin Plan further states that; to protect all beneficial uses the Regional Board may apply limits more stringent than MCLs. When a reasonable potential exists for exceeding a narrative objective, Federal Regulations mandate numerical effluent limitations and the Basin Plan narrative criteria clearly establish a procedure for translating the narrative objectives into numerical effluent limitations.
14. Wastewater generated from **timber processing operations** is regulated under the Code of Federal Regulations (CFR), Title 40, Part 429. The point source category guidelines apply (§ 429.10, Applicability) to “*any timber products processing operation, and any plant producing insulation board with wood as the major raw material, which discharges or may discharge process wastewater pollutants to waters of the United States, or which introduces or may introduce wastewater pollutants into a publicly owned treatment works*”. Effluent limitations for the following subcategories for timber product processing operations are applicable to this facility.
 - a. *Subpart A – Barking Subcategory, § 429.21(a): The following limitations apply to all mechanical barking installations: There shall be no discharge of process wastewater pollutants into navigable waters.*

- b. *Subpart I – Wet Storage Subcategory, § 429.101: Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent reduction attainable by the application of the best practicable control technology currently available (BPT): There shall be no debris discharged and the pH shall be within the range of 6.0 to 9.0. Part § 429.11(i) defines debris as woody material such as bark, twigs, branches, heartwood or sapwood that will not pass through a one-inch diameter round opening and is present in the discharge from a wet storage facility.*
- c. *Subpart K – Sawmill and Planning Subcategory, § 429.121: Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent reduction attainable by the application of the best practicable control technology currently available (BPT): There shall be no discharge of process wastewater pollutants into navigable waters.*
- d. *Subpart L – Finishing Subcategory, § 429.131: Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this subpart must achieve the following effluent reduction attainable by the application of the best practicable control technology currently available (BPT): There shall be no discharge of process wastewater pollutants into navigable waters.*

Review of the onsite wastewater collection system shows that the process wastewater from the sawmill operation, boiler blowdown, and the equipment maintenance area runoff, and other associated waste streams are commingled, stored in ponds, and disposed of via spray irrigation land disposal.

Timber processing operations at the facility for which effluent limits apply include: mechanical bark removal (40 CFR § 429.21(a)), wet storage, saw milling, planning and finishing. 40CFR § 429.100 contains effluent guidelines for wet log storage based on "best practicable control technology currently available." For the log deck runoff the Federal Regulations state that there shall be no debris discharged and the pH shall be within the range of 6.0 to 9.0. The Effluent Limitations for pH, in this Order are based on the Basin Plan's Water Quality Objective for pH that requires the pH remain greater than 6.5 and less than 8.5. Federal Regulations, 40 CFR § 429.11(i), define debris as woody material such as bark, twigs, branches, heartwood or sapwood that will not pass through a one inch diameter round opening.

- 15. The water utilized on the site for log deck sprinkling, and dust suppression is a wastewater and if discharged to surface waters, is required to meet discharge criteria.
- 16. ***Tannins and Lignins*** - Tannins and lignins are generated from wood products and could cause discoloration or a pH shift of the effluent or receiving water, presenting a reasonable potential for causing exceedance of the Basin Plan water quality standards for discoloration and pH. An Effluent Limitation for tannins and lignins of 30 mg/l (daily maximum) is included in this

Order based on best professional judgment.

17. ***Oil and Grease*** – Oil and Grease could be present from equipment maintenance and operations, thereby creating a reasonable potential for causing exceedance of Basin Plan water quality standards for floating material and possibly toxicity. An Effluent Limitation for oil and grease of 15 mg/l (daily maximum) and 10 mg/l (monthly average) is included in this Order based on best professional judgment.
18. ***Total Suspended Solids*** - A total suspended solids (TSS) limitation of 30 mg/l (monthly avg.) and 60 mg/l (daily max.) is included in the existing Order and is necessary to assure compliance with the Basin Plan water quality objectives for suspended material and turbidity. Reissuance of the permit with a less stringent limitation would violate the anti-backsliding provisions of the Federal Regulations, 40 CFR 122.44. This Order contains Effluent Limitations for TSS based on protection of the Basin Plan water quality objectives for suspended material and turbidity.
19. ***Total Dissolved Solids*** - A total dissolved solids (TDS) limitation of 300 mg/l (monthly avg.) and 500 mg/l (daily max.) is included in the existing Order and is necessary to assure compliance with the Basin Plan water quality objectives. Reissuance of the permit with a less stringent limitation would violate the anti-backsliding provisions of the Federal Regulations, 40 CFR 122.44, therefore the existing effluent limitations for TDS are maintained in this Order.
20. ***Chemical Oxygen Demand*** - Chemical oxygen demanding (COD) limitations of 30 mg/l (monthly avg.) and 60 mg/l (daily max.) are included in the existing Order. Chemicals present in boiler blowdown, and tannic acid from the wood processing, can cause high levels of COD in the effluent. The COD will utilize oxygen in the receiving stream. This Order contains a Receiving Water Limitation for dissolved oxygen of 7.0 mg/l based on protection of the cold-water aquatic life designation. Data provided by the Discharger indicates COD values as high as 37 mg/l, which indicates reasonable potential for the COD substances in the effluent. Reissuance of the permit with a less stringent limitation would violate the anti-backsliding provisions of the Federal Regulations, 40 CFR 122.44, therefore the existing effluent limitations for COD are maintained in this Order.
21. ***Aluminum*** - Based on samples collected by Regional Board staff during inspections, the discharge contained concentrations of aluminum as high as 2600 µg/l. U.S. EPA established Ambient Water Quality criteria for the protection of freshwater aquatic life of 87 µg/l (four-day average) and 750 µg/l (one-hour average). Using the methodology in the U.S. EPA's Technical Support Document (TSD) for Water Quality-Based Toxics Control, conversion of the limitation from an 1-hour average to a daily maximum, and 4-day average to a monthly average was done to allow effluent limitations to be consistent sampling frequencies defined by the monitoring and reporting program. This conversion resulted in a daily maximum effluent limit of 749 µg/l, and a monthly average limit of 87 µg/l for aluminum. The analytical data shows that the discharge has a reasonable potential to cause an exceedance of the Basin Plan narrative toxicity objective. This Order includes concentration-based Effluent

Limitations for aluminum based on the Basin Plan narrative toxicity objective utilizing the EPA's recommended Ambient Criteria. Aluminum exists as aluminum silicate in suspended clay particles, which US EPA acknowledges might be less toxic than other forms of aluminum. Correspondence with US EPA indicates that the criterion is not intended to apply to aluminum silicate particles. Therefore, a monitoring method that excludes clay particles is likely to be more appropriate. The use of acid-soluble analysis for compliance with the aluminum criterion appears to satisfy US EPA.

22. **Color** - Order No. 97-114 includes effluent limits for color (monthly average =50 Pt-Co, Daily Max.=100 Pt.-Co.). With the requirement for receiving water limitations of turbidity, monitoring for color is redundant. There is no indication in the record or findings of the previous Order to indicate why an effluent limit for color was included, and with the turbidity limitation preexisting, this change is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Resources Control Board Resolution 68-16. Any impact on existing water quality will be insignificant.
23. The beneficial uses of the underlying ground water are municipal and domestic, industrial service, industrial process and agricultural supplies.
24. This Order contains a Groundwater Limitation that requires the discharge not degrade groundwater quality when compared with background water quality, therefore the permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and SWRCB Resolution 68-16. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.
25. The Discharger utilizes ponds and spray irrigation for the treatment, storage, and disposal of wastewater. Pond Discharge Limitations have been included in this permit to assure that the pond system does not overflow or cause a nuisance. Nuisance conditions from pond systems are typically found when strong odors occur when the dissolved oxygen concentration is allowed to drop below 1.0 mg/l. This permit requires the dissolved oxygen concentration be maintained above 1.0 mg/l in the upper one-foot of water in the ponds. Ponds levees can fail for a variety of reasons, typically a lack of maintenance or overtopping due to wave action. This permit requires a minimum pond freeboard be maintained to prevent overtopping.
26. As stated in the above Findings, On 2 March 2000, the State Board adopted the SIP for implementation of the CTR and NTR. The SIP establishes methods of evaluating receiving water criteria and developing effluent limitations in NPDES Permits for priority pollutants. Section 2.4 of the SIP required that each discharger submit to the Regional Boards reports necessary to determine compliance with effluent limitations for priority pollutants in permits. Section 2.4.1 through 2.4.4 of the SIP requires that each discharger provide minimum standards for analysis and reporting. To implement the SIP, effluent and receiving water data is needed for all priority pollutants. On 10 September 2001 the Executive Officer issued a letter, in conformance with California Water Code, Section 13267, requiring the Discharger prepare a technical report assessing water quality. The study was intended to be consistent with the

requirements of the technical report in requiring sampling for NTR, CTR and additional constituents to determine the full water quality impacts of the discharge. The technical report requirements listed specific constituents, detection levels, acceptable time frames and report requirements. The technical report was due on 1 March 2003. The Discharger did not conduct the required sampling, did not submit the required report and has not adequately characterized the quality of the effluent being discharged to surface waters. This Order requires the Discharger conduct six rounds of priority pollutant sampling and prepare and submit a technical report fully characterizing the quality of the discharge. It may be necessary to sample boiler blowdown separately. This Order may be reopened, and additional effluent limitations added, based on the results of the analysis.

27. Effluent limitations, and toxic and pretreatment effluent standards established pursuant to Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 304 (Information and Guidelines), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act (CWA) and amendments thereto are applicable to the discharge.
28. The discharge is presently governed by Waste Discharge Requirements Order No. 97-114, adopted by the Regional Board on 20 June 1997.
29. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, et seq.), requiring preparation of an environmental impact report or negative declaration in accordance with Section 13389 of the California Water Code.
30. The Regional Board has considered the information in the attached Information Sheet in developing the Findings of this Order. The attached Information Sheet and Attachments A and B are part of this Order.
31. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
32. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.
33. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing, provided EPA has no objections.
34. Section 13267 of the California Water Code states, in part, “(a) A regional board, in establishing...waste discharge requirements... may investigate the quality of any waters of the state within its region” and “(b) (1) In conducting an investigation..., the regional board may require that any person who... discharges... waste...that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program

reports which the regional board requires.” This Order requires the Discharger to prepare technical and monitoring reports as authorized by California Water Code Section 13267. This Order requires the Discharger to monitor in compliance with the attached Monitoring and Reporting Program No. R5-2003-____. The monitoring reports are necessary to evaluate impacts to waters of the state to assure protection of beneficial uses, to assure compliance with State and Regional Board plans and policies, including Resolution 68-16, and to assure compliance with this Order. Sierra Pacific Industries discharges the waste that is regulated by this Order.

IT IS HEREBY ORDERED that Order No. 97-114 is rescinded and the Sierra Pacific Industries, its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions:

1. The discharge of wastewater at a location or in a manner different from that described in the Findings is prohibited.
2. Wastewater discharges to surface waters from barking, sawmill planing, and finishing operations, as defined in the Findings, is prohibited. Discharge of log deck wastewater that has been commingled with prohibited waste streams is prohibited.
3. Wastewater may only be discharged to surface waters during periods of sustained wet weather. Land disposal of wastewater shall be maximized when weather permits.
4. The by-pass or overflow of wastes to surface waters is prohibited, except as allowed by Standard Provision A.13. [See attached “Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)”].
5. Neither the discharge nor its treatment shall create a nuisance as defined in Section 13050 of the California Water Code.
6. The discharge of bark, sawdust, or other floating material to surface waters, or surface water drainage courses, is prohibited.

B. Effluent Limitations:

1. Effluent shall not exceed the following limits:

Constituents	Units	Monthly Average	Daily Maximum
Aluminum ²	µg/l	87	749
Chemical Oxygen Demand	mg/l	30	60
Tannins and lignins	mg/l	--	30
Oil and Grease	mg/l	10	15
Total Dissolved Solids	mg/l	300	500
Total Suspended Solids	mg/l	30	60
Dissolved Oxygen ¹	mg/l	--	7.0

¹ The dissolved oxygen limit is a daily minimum. The DO must be greater than 7.0 mg/l.

² Samples for aluminum may be analyzed utilizing an acid soluble extraction.

2. The discharge shall not have a pH less than 6.5 nor greater than 8.5.
3. Survival of aquatic organisms in 96-hour bioassays of undiluted waste shall be no less than:

Minimum for any one bioassay - - - - - 70%

Median for any three or more consecutive bioassays - - - - 90%

C. Discharge Specifications (Spray Irrigation):

1. The discharge shall be distributed uniformly on adequate acreage in compliance with the Discharge Specifications.
2. Hydraulic loading of wastewater shall be at reasonable agronomic rates designed to minimize the percolation of process wastewater below the root zone (i.e., deep percolation).
3. Areas irrigated with wastewater shall be managed to prevent breeding of mosquitoes. More specifically:
 - a. All applied irrigation water must infiltrate completely within 24 hours.
 - b. Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation.
 - c. Low-pressure and un-pressurized pipelines and ditches, which are accessible to mosquitoes, shall not be used to store reclaimed water.
4. Discharges to the spray irrigation fields shall be managed to minimize erosion of the disposal area.

5. The Discharger, using reasonable forecasting tools, may not discharge effluent to the disposal fields 24 hours before precipitation, during periods of precipitation, and for at least 24 hours after cessation of precipitation, or when soils are saturated.
6. The resulting effect of the wastewater discharge on the soil pH shall not exceed the buffering capacity of the soil profile.
7. Runoff of wastewater from the spray disposal field shall be captured and returned to the wastewater ponds. The first measurable runoff of precipitation that occurs after recent wastewater disposal shall be contained and diverted back to the storage ponds (i.e. "first flush").
8. On or about **1 October** of each year, available pond storage capacity shall at least equal the operational volume necessary to contain the wastewater throughout the wet season.

D. Discharge Specifications (Ponds):

1. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the mill site.
2. As a means of discerning compliance with Discharge Specification No.1 the dissolved oxygen content in the upper zone (1 foot) of wastewater in ponds shall not be less than 1.0 mg/l.
3. Ponds shall not have a pH less than 6.5 or greater than 9.0.
4. Ponds shall be managed to prevent breeding of mosquitoes. In particular,
 - a. An erosion control program should assure that small coves and irregularities are not created around the perimeter of the water surface.
 - b. Dead algae, vegetation, and debris shall not accumulate on the water surface.
5. Freeboard shall never be less than two feet (measured vertically to the lowest point of overflow) for all ponds.

E. Solids Disposal:

1. Collected screenings and other solids removed from liquid wastes shall be disposed of in a manner approved by the Executive Officer, and consistent with *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq.

F. Receiving Water Limitations:

Receiving Water Limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit.

The discharge shall not cause the following in the receiving water:

1. Concentrations of dissolved oxygen to fall below 7.0 mg/l. The monthly median of the mean daily dissolved oxygen concentration shall not fall below 85 percent of saturation in the main water mass, and the 95th percentile concentration shall not fall below 75 percent of saturation.
2. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
3. Oils, greases, waxes, floating material (liquids, solids, foams, and scums) or suspended material to create a nuisance or adversely affect beneficial uses.
4. Esthetically undesirable discoloration.
5. Fungi, slimes, or other objectionable growths.
6. The turbidity to increase as follows:
 - a. (The 30-day average turbidity to increase) More than 1 Nephelometric Turbidity Units (NTUs) where natural turbidity is between 0 and 5 NTUs.
 - b. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
 - c. More than 10 NTUs where natural turbidity is between 50 and 100 NTUs.
 - d. More than 10 percent where natural turbidity is greater than 100 NTUs.
7. The ambient pH to fall below 6.5, exceed 8.5, or the 30-day average ambient pH to change by more than 0.5 units.
8. The ambient temperature to increase more than 5°F.
9. Deposition of material that causes nuisance or adversely affects beneficial uses.
10. Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.
11. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant,

animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.

12. Violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board pursuant to the CWA and regulations adopted thereunder.
13. Taste or odor-producing substances to impart undesirable tastes or odors to domestic or municipal water supplies or to fish flesh or other edible products of aquatic origin or to cause nuisance or otherwise adversely affect beneficial uses.
14. The receiving water limitations for temperature, turbidity and pH require that the discharge not cause the receiving water to change by specified amounts. The receiving stream at the point of discharge is the headwaters for the unnamed tributary to North Canyon Creek. An upstream sampling point is not available to determine the thermal, pH shift and turbidity impacts of the discharge. The unnamed tributary to North Canyon Creek flows through open areas, prior to entering the North Canyon Creek, and the thermal, pH and turbidity impacts from any other discharges entering the drainage course could mask actual impacts of the discharge from the facility on downstream waters. In order to determine compliance for these constituents in the discharge and receiving waters, the Monitoring and Reporting Program establishes five sampling locations. These locations are: 1) Outfall A; 2) Discharge from the site (SP-4) at the property line of the facility; 3); and at points in North Canyon Creek, 4) 50-feet upstream (R-1) and 5) 100 feet downstream (R-2) from the point where the unnamed tributary enters North Canyon Creek. The Discharger shall prepare a monthly report, submitted with the Discharger Self Monitoring Report, assessing the receiving water impacts of the discharge and compliance with the Receiving Water Limitations.

G. Groundwater Limitation:

1. The discharge shall not cause the groundwater quality to be degraded.

H. Provisions:

1. The treatment facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
2. Hydrogeologic Evaluation and Groundwater Monitoring Tasks. **Within 18-months of the adoption of this Order**, the Discharger shall complete a hydrogeologic investigation within the area affected and potentially affected by the wastewater facility and its discharge to land.

The technical report documenting the hydrogeologic investigation shall describe the underlying geology, existing wells (active and otherwise), local well construction practices and standards, well restrictions, hydrogeology and assess all impacts of the wastewater

discharge on water quality. The groundwater quality must be monitored at least quarterly for a minimum of four quarters for pH, TDS and EC and once during the life of the permit for U.S. EPA priority pollutants. The technical report must present, for each monitoring event, determinations for the direction and gradient of groundwater flow.

The groundwater-monitoring network shall include one or more background monitoring wells and sufficient number of designated monitoring wells to evaluate performance of BPTC measures and determine if the discharge has degraded groundwater. These include monitoring wells immediately down gradient of every treatment, storage, and disposal unit that does or may release waste constituents to groundwater. All wells shall comply with appropriate standards as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981), and any more stringent standards adopted by the Discharger or county pursuant to CWC section 13801.

Any existing well network will be evaluated, and the proposed network should include existing monitoring wells where they will serve to measure compliance or provide other relevant information (e.g., depth to groundwater). The Discharger shall install approved monitoring wells, properly destroy ineffective wells, and commence groundwater monitoring in accordance with this Order's Monitoring and Reporting Program. After the first sampling event, the Discharger shall report on its sampling protocol as specified in this Order's Monitoring and Reporting Program (MRP).

After one year of monitoring, the Discharger shall characterize natural background quality of monitored constituents in a technical report. If the monitoring shows that any constituent concentrations are increased above background water quality, the Discharger shall submit a technical report describing the evaluation's results and critiquing each evaluated component with respect to BPTC and minimizing the discharge's impact on groundwater quality. In no case, shall the discharge be allowed to exceed a water quality objective. Where treatment system deficiencies are documented, the technical report shall provide recommendations for necessary modifications (e.g., new or revised salinity source control measures, treatment component upgrade and retrofit) to achieve BPTC and proposed schedule for modifications for achieving full compliance prior to expiration of this Order. This Order may be reopened and additional groundwater limitations added.

3. Based upon site inspections, runoff from the spray irrigation disposal area discharges to Outfall 001 when irrigation occurs. As identified in Finding No. 3, wastewater that is disposed of at this location is prohibited from being discharged to surface waters. The Discharger is required to contain runoff from this area and return it to the storage ponds. Additionally, it is unclear in the Report of Waste Discharge if the ponds and disposal area are of sufficient capacity to fully contain and dispose of the wastewater onsite. The Discharger is required analyze the capacity of the waste disposal operation to show that sufficient capacity exists, and to correct any runoff issues from the spray disposal area. The Discharger shall complete a water balance for the site. The Discharger shall comply with the following time schedule in conducting a study of the facilities land disposal capacity,

eliminate the discharge of runoff to surface water and correct any drain problems in the land disposal area:

<u>Task</u>	<u>Compliance Date</u>
Submit Workplan and Time Schedule	1 July 2005
Begin Study	1 August 2005
Complete Study	1 November 2005
Submit Study Report	15 November 2005

The Discharger shall submit to the Regional Board on or before each compliance due date, the specified document or a written report detailing compliance or noncompliance with the specific date and task. If noncompliance is reported, the Discharger shall state the reasons for noncompliance and include an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Board by letter when it returns to compliance with the time schedule.

4. The Discharger shall conduct the chronic toxicity testing specified in the Monitoring and Reporting Program. If the testing indicates that the discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the water quality objective for toxicity, the Discharger shall initiate a Toxicity Identification Evaluation (TIE) to identify the causes of toxicity. Upon completion of the TIE, the Discharger shall submit a workplan to conduct a Toxicity Reduction Evaluation (TRE) and, after Regional Board evaluation, conduct the TRE. This Order may be reopened and a chronic toxicity limitation included and/or a limitation for the specific toxicant identified in the TRE included. Additionally, if a chronic toxicity water quality objective is adopted by the State Water Resources Control Board, this Order may be reopened and a limitation based on that objective included.
5. Stormwater discharges from this facility are not covered by this Order. The State Water Resources Control Board (SWRCB) adopted Order No. 97-03-DWQ (General Permit No. CAS000001), on 17 April 1997, specifying waste discharge requirements for discharge of storm water associated with industrial activities, excluding construction activities, that requires submittal of a Notice of Intent, preparation of a Storm Water Pollution Prevention Plan, Site Map, and Monitoring Program by industries to be covered under the permit. The General Permit, Table D, requires sawmill facilities to sample for additional constituents. The previous NPDES permit included storm water monitoring, however, due to programmatic changes, storm water is now regulated separately from wastewater. The Discharger is required to obtain a General Industrial Storm Water Permit for the site and comply with the terms and conditions of that Order within 60 days of this Order.
6. The Discharger shall collect a minimum of six (6) samples and provide laboratory analysis of the wastewater, characteristic of the discharge to surface waters. The samples shall be spaced to characterize any seasonal differences in the discharge. The analysis shall be in accordance with the effluent data requested by the Regional Board in the 10 September 2001 letter to the Discharger. If the facility does not discharge wastes to surface waters,

samples shall be collected that are representative of what would be discharging if a discharge were to occur. The Discharger shall comply with the following time schedule to complete the assessment of the discharge from the facility and submit the study as previously required.

<u>Task</u>	<u>Compliance Date</u>
Submit Sampling Workplan	1 April 2005
Commence Study	1 June 2005
Complete Sampling	1 June 2006
Submit Technical Report of Analysis	1 August 2006

The Discharger shall submit to the Regional Board on or before each compliance due date, the specified document or a written report detailing compliance or noncompliance with the specific date and task. If noncompliance is reported, the Discharger shall state the reasons for noncompliance and include an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Regional Board by letter when it returns to compliance with the time schedule. This Order may be reopened, and additional effluent limitations added, based on the results of the analysis.

7. The Discharger shall comply with all the items of the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES)", dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provisions."
8. The Discharger shall comply with Monitoring and Reporting Program No. _____, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.

When requested by U.S. EPA, the Discharger shall complete and submit Discharge Monitoring Reports. The submittal date shall be no later than the submittal date specified in the Monitoring and Reporting Program for Discharger Self Monitoring Reports.

9. This Order expires on _____ and the Discharger must file a Report of Waste Discharge in accordance with Title 23, CCR, not later than 180 days in advance of such date in application for renewal of waste discharge requirements if it wishes to continue the discharge.
10. Prior to making any change in the discharge point, place of use, or purpose of use of the wastewater, the Discharger shall obtain approval of, or clearance from the State Water Resources Control Board (Division of Water Rights).
11. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the State of incorporation if a corporation, address and telephone number of the persons responsible for contact with the Regional Board and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

THOMAS R. PINKOS, Executive Officer